



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION:	CF34-10A18	BYPASS RATIO:	5.4
UNIQUE ID NUMBER:	11GE141	PRESSURE RATIO (π_{00}):	26.5
COMBUSTOR:	2253M21		
ENGINE TYPE:	TF	RATED THRUST (F_{00}) (kN):	82.1

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	14.6	98.5	43.3	19.0
AS % OF ORIGINAL LIMIT	74.5	83.5	46.6	76.1
AS % OF CAEP/2 LIMIT (NO _x)			58.2	
AS % OF CAEP/4 LIMIT (NO _x)			68.9	
AS % OF CAEP/6 LIMIT (NO _x)			78.0	
AS % OF CAEP/8 LIMIT (NO _x)			90.2	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.826	0.05	0.66	19.47	14.7
CLIMB OUT	85	2.2	0.684	0.08	0.36	16.72	7.0
APPROACH	30	4.0	0.232	0.13	3.43	8.26	0.1
IDLE	7	26.0	0.086	5.67	47.29	3.58	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			315	776	6589	3070	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				9.5	80.2	37.4	14.7
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.6	1.8	0.4	0.3
RANGE (D _p /F ₀₀ in g/kN, or SN)				8.8-9.8	78.8-82.3	36.9-37.7	14.5-15.1

ACCESSORY LOADS

POWER EXTRACTION	0	(kW)	AT	All	POWER SETTINGS
STAGE BLEED	0	(% CORE FLOW)	AT	All	POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.2-97.9
TEMPERATURE (K)	296-300
ABS HUMIDITY (kg/kg)	0.0099-0.0127

FUEL

SPEC	Jet A-1
H/C	1.92
AROM (%)	16.3-17.4

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: Peebles Test Operation
 TEST LOCATION: Site 4D
 TEST DATES: 05/09/2006-10/09/2006

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

- GE Report R2007AE480Engine 994-251/1
- Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
- NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)